

Light Pipe with Side-Light Extraction

Abstract of the Disclosure

5 A light pipe with uniform side-light emission has a core comprising a polymer, and a fluoropolymer cladding on the core with a lower refractive index than the core. Light-scattering material is distributed within the core along an active section of light pipe in which side-light emission is desired, with a density gradient chosen to achieve uniform side-light emission.

10 Another light pipe with uniform side-light emission has a core comprising a polymer, and a fluoropolymer cladding on the core with a lower refractive index than the core. Light-scattering material is distributed within at least one of the cladding and the core along an active section of light pipe in which side-light emission is desired, with a density gradient chosen to yield uniform side light emission, and substantially only in a radial swath, along the longitudinal axis of the light pipe, of substantially less than 360 degrees.